

CLAIMS

1. An interspecific *Nicotiana* hybrid of *Nicotiana Excelsior* x *N. Benthamiana*, wherein a sample of said seed has been deposited under ATCC Accession No. PTA -323.
2. A plant, or its parts, produced by growing the seed of claim 1.
3. Pollen of the plant of claim 2.
4. An ovule of the plant of claim 2.
5. A *Nicotiana* plant having essentially all of the physiological and morphological characteristics of the *Nicotiana* plant of claim 2, or its parts.
6. Tissue culture of the seed of claim 1.
7. A *Nicotiana* plant regenerated from the tissue culture of claim 6.
8. Tissue culture of regenerable cells of the plant, or its parts, of claim 2.
9. The tissue culture of claim 8 wherein the regenerable cells are embryos, meristematic cells, pollen, leaves, anthers, roots, root tips, flowers, seeds, stems, pods, or protoplasts or calli derived therefrom.
10. A *Nicotiana* plant regenerated from the tissue culture of claim 9.
11. A method of producing backcross progeny from interspecific *Nicotiana* hybrids comprising:
 - a. selecting one parent of an interspecific hybrid as a recurrent parent based on biomass greater than the primary interspecific hybrid;

- b. backcrossing said interspecific hybrid to the recurrent parent and collecting the resulting seed.
- 12. The seed produced from the method of claim 11.
- 13. A *Nicotiana* plant, or its parts, produced by growing the seed of claim 12.
- 14. Tissue culture of regenerable cells of the plant, or its parts, of claim 13, wherein the regenerable cells are selected from the group consisting of: embryos, meristematic cells, pollen, leaves, anthers, roots, root tips, flower, seeds, stems, protoplasts and calli derived therefrom.
- 15. A method of producing backcross progeny from interspecific *Nicotiana* hybrids comprising:
 - a. selecting one parent of an interspecific hybrid as a recurrent parent based on capacity for high level expression of systemic protein from a viral vector;
 - b. backcrossing said interspecific hybrid to the recurrent parent and collecting the resulting seed.
- 16. The seed produced from the method of claim 15.
- 17. A *Nicotiana* plant, or its parts, produced by growing the seed of claim 16.
- 18. Tissue culture of regenerable cells of the plant, or its parts, of claim 17, wherein the regenerable cells are selected from the group consisting of: embryos, meristematic cells, pollen, leaves, anthers, roots, root tips, flower, seeds, stems, protoplasts and calli derived therefrom.